

CLAIMS

What is claimed is:

1. A method for transferring data files from a local drive medium to a redundant array of independent disks (RAID) controller flash memory, comprising:
  - obtaining a data file from the local drive;
  - adding a signature to the data file to form a transferable file; and
  - if needed, padding the transferable file to ensure a same number of bytes in each transfer of portions of the transferable file from the local drive medium to a flash memory of a RAID controller.
2. The method of Claim 1, wherein the signature is formed from two or more bytes.
3. The method of Claim 2, wherein the signature is formed from four bytes.
4. The method of Claim 2, wherein the signature is formed from eight bytes.
5. The method of Claim 1, wherein each of the portions of the transferable file contains 128 bytes.
6. The method of Claim 1, wherein each of the portions of the transferable file contains 1024 bytes.
7. The method of Claim 1, wherein data in the data file is either in American Standard Code for Information Interchange (ASCII) format or in Extended Binary Coded Decimal Interchange Code (EBCDIC) format.

8. The method of Claim 1, wherein the method ensures data integrity when a terminal emulation program is used to access the data file.
9. The method of Claim 8, further comprising storing the transferable file in a buffer in the RAID controller.
10. The method of Claim 9, further comprising identifying the padded signature of the transferable file, identifying the end of the data file, and writing the data file to the flash memory.

11. A system, comprising:
  - a redundant array of independent disks (RAID) controller having a flash memory; and
  - a host having two or more disk drives, the host being coupled to the RAID controller, wherein a selected one of the two or more disk drives is capable of transferring a data file to the RAID controller by attaching a multibyte signature to the end of the data file before transfer.
12. The system of Claim 11, wherein the signature is attached through the operation of a utility program.
13. The system of Claim 12, wherein the RAID controller contains software that recognizes the multibyte signature attached to the end of the data file before transfer.
14. The system of Claim 13, wherein the data file contains multiple data words, each of the multiple data words having multiple bytes.
15. The system of Claim 14, wherein the signature forms a portion of one or two data words.
16. The system of Claim 15, wherein the data file is further padded with a terminal emulation program specific pattern after the signature in the data file if a last byte of the signature does not coincide with a last byte of a last data word.
17. The system of Claim 16, wherein the specific pattern is either 0x00 or 0x1A.
18. The system of Claim 17, wherein the signature includes alternating bytes of

0xFF and 0x00.

19. The system of Claim 17, wherein the signature includes a byte having a value other than 0xFF and 0x00.

20. The system of Claim 17, wherein the signature is formed of alphanumeric characters.

21. The system of Claim 16, wherein data integrity is maintained when a terminal emulation program is used.

22. The system of Claim 21, wherein the terminal emulation program recognizes a different end of file patched data pattern than does a file transfer program used by the system.

23. A system for reliably transferring data files, comprising:  
first and second means for storing data; and  
means for controlling data file transfer to and from the first and/or second means for storing,  
wherein a data file the data file transfer from one of the first and second means for storing data to the controlling means includes adding a multibyte signature to a data file to be transferred.
24. The system of Claim 23, wherein the first and second means for storing data are disk drives.
25. The system of Claim 24, wherein the multibyte signature is either eight or four bytes long.